REMARKS

Applicants note that claims 1-28 and 47-50 are allowed. Further, Applicants have amended claims 1, 5-7, 9-15, 19-21, 24, 29, 33-35, and 37-44 to make minor formatting changes. The amendments do not add new matter, and do not narrow the scope of the claims.

The Examiner rejected claims 29 and 41 under 35 U.S.C. §102(e) as being anticipated by Levine. Applicants disagree. The claimed invention is directed to a two-stage method of time-stamping a document. Claim 29 is directed to the first stage in which an outside agency generates an uncertified time stamp receipt and a message authentication code (MAC). The MAC is a one-way hash function that <u>includes</u> the secret key. That is, the MAC is a keydependent function of both the uncertified time stamp receipt and a secret key. Only the outside agency that generated the MAC has knowledge of the secret key. Therefore, only that outside agency can verify the MAC in the second stage of the claimed invention.

Levine does not generate a MAC as called out in claim 29, but in contrast, teaches using a secret key to conventionally sign a time stamped document. Levine discloses a time stamping service that hashes a time-stamped document using a standard hashing algorithm. The time-stamping service than cryptographically signs (i.e., certifies) the time-stamped document hash with a secret key. *Levine*, col. 3, ln. 54 – col. 4, ln. 8. The signed document hash may then be returned to the requestor or stored in memory. Signing a document hash with a secret key as disclosed by Levine does not teach generating a MAC as recited in claim 29. It simply teaches using the secret key to certify the hash as is conventionally known. As stated above, the MAC is key-dependent, and thus, only the agency that generated the MAC is able to verify the MAC. In Levine, however, <u>any third party</u> that has access to a corresponding public key can verify the signature of the time stamping service, as well as the hash. *Levine*, col. 5, ll. 12-24.

In short, Levine does not generate a MAC, and thus, does not teach the "generating" and "transmitting" elements of claim 29. Because Levine fails to teach each element of claim 29, Levine fails to anticipate claim 29 under §102.

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Claim 41 is directed to the second stage in which the outside agency validates the MAC and, if the MAC is valid, certifies the time stamp receipt by cryptographically signing the time stamp receipt using the secret key. As previously stated, Levine does not teach generating a MAC, and therefore, cannot teach that an outside agency certifies a time stamp receipt based on the validity of a MAC. In fact, whatever the time stamping service transmits is already certified. Anyone with a corresponding public key can verify the time stamped hash. Therefore, Levine has no need for the time stamping service to validate or certify anything in a second stage.

Levine fails to anticipate the claimed invention under §102. As such, Applicants request allowance of all pending claims 1-50.

Respectfully submitted

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